## Virginia Saltwater Development Fund Evaluation of a Proposal for the Development of a Research or Data Collection Project

Project Number: 0606-13 Date: 09/08/06

Title: M) Prey Availability and Enhanced Production of Artificial Reefs for Recreational Fish and Native Oysters. .

"The Virginia Saltwater Recreational Fishing Development Fund is to be used solely for the purpose of conserving and enhancing finfish taken by recreational anglers, enforcing laws related to natural resource conservation, improving recreational fishing opportunities, obtaining necessary data and conducting research for fisheries management, and creating or restoring habitat for species taken by recreational fishermen."

Code of Virginia, Section 28.2-302.3

NOTE: Please read the entire scoresheet before beginning, then provide comments, and circle () the appropriate score for each item. Thank You.

### A. Problem Description and Resolution (20 points)

1. Comment on the adequacy of the problem description, background information, knowledge of available literature/data sources, and anticipated benefits.

The project description is well written with adequate, up to date, background information. Comparing the productivity of different structures would provide useful information as to the quantity and composition of the biomass produced by the introduction of an artificial reef.

2. Describe your views on the conceptual approach to solve the problem.

The conceptual approach in terms of sampling and description of predator-prey relationships is straightforward. By using identical sampling protocols, valid comparison of food availability through the benthic community can be established and compared structure by structure. Fish gut content analysis would contribute toward understanding of the predator-prey relationships in this community.

SCORE (Circle one)	Poor				Excellent
	0	5	10	(15)	20

#### B. Soundness of Project Design/Technical Approach (25 points)

1. Is there sufficient information to technically evaluate the proposal?

Yes.

2. What are the strengths/weaknesses of the project design (thoroughness, practicality, methods, integration with other work, etc.)?

The pre-deployment sampling approach is excellent. The project design should facilitate comparison in both quantity and composition of the benthic communities that develop around and within each structure both pre and post deployment.

As with the Lipcius study, inclusion of a variety of community "stakeholders" is excellent; however, using recreational fishermen in the sampling protocol has the potential of introducing collection error.

The proposed structure layout as shown in "Figure 2" has all of the structures placed within 47 feet. This is far too close to facilitate a clear evaluation of individual units. Also, the quantity of each type of reef material needs to be more specific.

#### C. Project Management and Experience/Qualifications of Personnel (15 points)

What is your opinion of the experience and capabilities of the Principal Investigator(s) to manage and conduct the work, the availability of facilities, and education and experience of assisting personnel.

Experience and capabilities of all personnel involved appear to be excellent.

#### D. Project costs (15 points)

Is the budget realistic and reasonable? Indicate any unreasonable costs.

The budget does appear to be reasonable, but there is apparently a typo referencing the number of boat days requested (30 vs 24).

This is a study aligned with the Lipcius work. Combining sampling trips and support personnel might prove efficient.

#### E. Value of the Project to Fisheries Managers (25 points)

Do you believe the results of this project will further management of the species described? Will the results be useful to managers?

This information should prove useful for management involved with oyster or combined finfish reef development in the Lynnhaven or other environmentally similar systems. It may help open up additional areas for consideration for additional artificial reef development in general.

# PLEASE ADD ANY FURTHER COMMENTS ON THE PROPOSALS BELOW:

As with the Lipcius study, the information developed should be applicable to water systems environmentally similar to the Lynnhaven. The degree of applicability to the Chesapeake Bay in general is subject to question. Adding Bay sites to the Lipcius study, with follow-up by this project, would provide more credible data applicable to the Bay.

Coordinating efforts with the Lipcius study should provide economies for both projects.

Also, given the potential benefit this project would provide the oyster fishery, participation by that sector would seem appropriate.